

ABSTRACT OF THE DISCLOSURE

5 A system and method are provided for isolating the execution of a plurality of applications which access shared data. A limited number of special classes encapsulate data that should be shared by all classes in the multitasking system. Static fields of all classes, including the special classes, are virtualized such that each application has its own copy of static fields and class monitors. However, a special class has special program code associated with it, such that an invocation of any of the methods of the special class causes a switch of an application ID associated with the thread (referred to
10 herein as an effective thread application ID or TA-ID) to a constant value. Thus, the applications may access a single, shared copy of the special class. The TA-ID may be changed back to the original value upon exiting one of the methods. Although one instance of identifier-switching is typically more costly than one instance of determining whether a class is special, the identifier-switching may be performed only for special
15 classes rather than for all classes. The common case may therefore be optimized.

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